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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,182	08/21/2003	David Wayne Moore	SVL920030065US1	9082

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EXAMINER

DAYE, CHELCIE L

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/646,182	MOORE ET AL.	
	Examiner	Art Unit	
	Chelcie Daye	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is issued in response to applicant's amendment filed July 16, 2006.
2. Claims 1-30 are presented. No claims added and none cancelled.
3. Claims 1-30 are pending.
4. Applicant's arguments filed July 16, 2006, have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 1,11, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Circenis (US Patent No. 6,026,424) issued on February 15, 2000.**

Regarding Claims 1,11, and 21, Circenis discloses a method of facilitating data flow between a synchronous process and an asynchronous process, comprising:

converting an input asynchronous data flow from the synchronous process into a synchronous data flow (column 6, lines 31-33, Circenis)¹;

¹ Examiner Notes: The act of converting corresponds to "switches" and the inputting of information, is executed by the client process (column 4, lines 16-22, Circenis). Also, "synchronous mode" corresponds

processing the synchronous data flow (column 6, lines 35-44, Circenis) by means of a synchronous task (column 6, lines 33-35, Circenis);
converting the processed synchronous data flow into an output asynchronous data flow (column 6, lines 50-56, Circenis)²; and
feeding the output asynchronous data flow to the asynchronous process (column 6, lines 60-67, Circenis)³.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 2-9,12-19, and 22-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Circenis (US Patent No. 6,026,424) issued on February 15, 2000, as applied to claims 1,11, and 21 above, in view of Cole (US Patent Publication No. 20020091719) filed on January 9, 2001.**

to synchronous process, while the synchronous data flow, is represented by the steps that the process has to go through (column 6, lines 35-44, Circenis).

² Examiner Notes: The act of converting is represented by, the server contacting the client and informing the client that the task will "continue" asynchronously. Also, once the task has switched to asynchronous mode, it can only be characterized as an output data flow because the timer has stopped and the only way to complete the task is in the last mode represented which would be asynchronous mode. As such, after completion results are returned which corresponds to the output of the data flow (column 7, lines 5-10, Circenis).

³ Examiner Notes: Feeding corresponds to "freeing", because both represent advancing information through a system.

Regarding Claims 2, 12, and 22, Circenis discloses all of the claimed subject matter as stated above. However, Circenis does not explicitly disclose the use of a buffer queue for the input of the asynchronous data flow. On the other hand, Cole discloses the use of a buffer queue ([0040], lines 5-8, Cole) for the input of the asynchronous data flow. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Cole's buffer queue into the Circenis system for the input asynchronous data flow. A skilled artisan would have been motivated to combine the two references as stated by Cole in order to permit configurability for optimal memory space usage ([0039], lines 13-15, Cole). Circenis and Cole are analogous art because they are from the same field of endeavor of a system for executing tasks of varying results to avoid tying up the system. As a result, the buffer queues temporarily store data to help compensate for differences in the transfer rate of data. Also, data from a buffer is available more quickly than data from where the buffer retrieved it.

Regarding Claims 3, 13, and 23, the combination of Circenis in view of Cole, disclose a method further comprising dequeuing a plurality of input buffers ([0041], lines 6-8, Cole) from the synchronous buffer queue ([0040], lines 5-8, Cole).

Art Unit: 2161

Regarding Claims 4, 14, and 24, the combination of Circenis in view of Cole, disclose a method further comprising enqueueing the processed synchronous data flow on an asynchronous buffer queue ([0041], lines 4-6, Cole).

Regarding Claims 5, 15, and 25, the combination of Circenis in view of Cole, disclose a method wherein processing the synchronous data flow comprises sorting the synchronous data flow ([0058], lines 11-16, Cole)⁴.

Regarding Claims 6, 16, and 26, the combination of Circenis in view of Cole, disclose a method further comprising enqueueing the sorted synchronous data flow to a plurality of output buffers ([0056], lines 5, Cole)⁵.

Regarding Claims 7, 17, and 27, the combination of Circenis in view of Cole, disclose a method further comprising synchronously filling the output buffers with the sorted synchronous data flow ([0046], lines 6-14, Cole)⁶.

Regarding Claims 8, 18, and 28, the combination of Circenis in view of Cole, disclose a method wherein the number of the output buffers is limited to a predetermined maximum value⁷ ([0052], lines 2-7, Cole).

⁴ Examiner Notes: The action of sorting corresponds to "enumerated by a handle", which is an array index. Also, Fig. 1, item 18 shows a sorting mechanism.

⁵ Examiner Notes: Output corresponds to "returning".

⁶ Examiner Notes: Filling corresponds to "Loading".

Regarding Claims 9,19, and 29, the combination of Circenis in view of Cole, disclose a method further comprising saving the sorted synchronous data flow in the output buffers at a record processor until the output buffers are requested by the asynchronous process (column 6, lines 8-15, Circenis).

9. Claims 10,20, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Circenis (US Patent No. 6,026,424) issued on February 15, 2000, in view of Rose (US Patent No. 6,519,595) filed on March 2, 1999.

Regarding Claims 10,20, and 30, Circenis discloses all of the claimed subject matter as stated above. However, Circenis does not explicitly disclose a method comprising saving the processed the synchronous data flow for an image copy restore task. On the other hand, Rose discloses a method comprising saving the processed the synchronous data flow for an image copy restore task⁸ (column 2, lines 30-35, Rose). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Rose's teachings into the Circenis system. A skilled artisan would have been motivated to do so in order to make an exact reproduction of all or part of the essential data needed. As a result, this ensures a user that a system failure will not conclude with a loss of data.

⁷ Examiner Notes: The predetermined maximum value corresponds to "Queue-Full".

Response to Arguments

Applicant argues, Circenis does not disclose “a method of facilitating data flow between a synchronous process and an asynchronous process”. The applicant further clarifies the distinction between the terms “data flow” and “task”.

Examiner respectfully disagrees. In response to applicant's arguments, the recitation “a method of facilitating data flow between a synchronous process and an asynchronous process”, has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Also, to give further clarification of the invention applicant further explains the difference between a “data flow” and a “task”. However, it is noted that the features upon which applicant relies (i.e., “data flow occurring between two known sets of code, but with different handshake protocols” and “there are two types of tasks, synchronous and asynchronous, present invention only concerned with the synchronous tasks”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into

⁸ Examiner Notes: The image copy restore task corresponds to a “battery backup SRAM”.

the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, the broadest reasonable interpretation of the claim language is given and if specific terms have specific/special meanings, incorporation into the claim language would be desired.

Applicant argues, Circenis does not disclose “converting an input asynchronous data flow from the synchronous process into a synchronous data flow”, because “Circenis switches the task but not the data flow”.

Examiner respectfully disagrees. As stated in the action above, Circenis discloses at column 6, lines 31-33, wherein a task begins in synchronous mode and then switches to asynchronous mode when it is identified as a long duration task. Examiner believes the data flow has been switched because the system was originally being performed synchronously (i.e. all at the same time), but after a certain duration in time the flow of the data is switched to asynchronously (i.e. not at the same time – time delay). Therefore, by switching between different modes the flow of the data is converted.

Applicant argues, Circenis does not teach “converting the processed synchronous data flow into an output asynchronous data flow”.

Examiner respectfully disagrees. As stated in the action above, Circenis discloses at column 6, lines 50-56, wherein as stated earlier the system begins in the synchronous mode and switches to the asynchronous mode. After which the process continues in the asynchronous mode until complete (column 6, lines 57-59, Circenis). Also, once the task has switched to asynchronous mode, it can only be characterized as an output data flow because the times has stopped and the only way to complete the task is in the last mode represented, which would be asynchronous mode (i.e. the flow of the data is not at the same time). Therefore, still disclosing that the flow of the data is switched along with the task.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chelcie Daye whose telephone number is 571-272-3891. The examiner can normally be reached on M-F, 7:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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